



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/709,145	11/10/2000	Arturo A. Rodriguez	A-6655	3251
5642	7590 07/20/2004		EXAMINER	
SCIENTIFIC-ATLANTA, INC. INTELLECTUAL PROPERTY DEPARTMENT 5030 SUGARLOAF PARKWAY			LONSBERRY, HUNTER B	
			ART UNIT	PAPER NUMBER
LAWRENCEVILLE, GA 30044			2611	2
	·		DATE MAILED: 07/20/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/709,145	RODRIGUEZ, ARTURO A.				
Office Action Summary	Examiner	Art Unit				
	Hunter B. Lonsberry	2611				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address						
Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM						
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	mely filed ys will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on	_·					
2a) This action is FINAL. 2b) ☐ This	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4)⊠ Claim(s) <u>1-46</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-46</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8)☐ Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	er.					
10)⊠ The drawing(s) filed on <u>11 November 2000</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list		ved.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) 🗍 Interview Summar Paper No(s)/Mail [					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	5) Notice of Informal	Patent Application (PTO-152)				
Paper No(s)/Mail Date	6)					

Art Unit: 2611

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-7, 9-17, \$29-26 and 28-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,157,377 to Shah-Nazaroff in view of U.S. Patent 5,764,899 to Eggeston.

Regarding claims 1, 9, 11, 19, Shah-Nazaroff discloses in figure 5, a number of viewing options with prices for PPV and VOD listings, such as audio and video quality upgrades and the ability to record, prices are higher for better quality video as more bandwidth is consumed (column 2, lines 17-52, 63-67, column 3, lines 1-16, 65-67, Figure 4).

Shah-Nazaroff does not disclose dynamically assigning a price criterion to a group of viewing options based in part on bandwidth allocation information.

Eggleston discloses a rate governor which tracks the time and expense for networked resources a client uses, rates might be higher for better quality of service, or rates may be different based upon the time of day, alerts are sent to a user to let them know to stay within their budget, billing estimates for use may also be presented to a user (column 13, line 60-column 14, line 53, column 15, lines 25-41).

Art Unit: 2611

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Shah-Nazaroff to dynamically price options according to the time of day or available bandwidth as taught by Eggleston, thus compensating for a providers bandwidth costs during prime time hours, and offering incentives for users to watch programs during less popular viewing hours.

Regarding claims 2, 3, 12, 13, 21, 22, 31, Shah-Nazaroff discloses in Figure 5, a number of viewing options and prices, user selections are transmitted to a server prior to the upgraded features being provided to the user (Figure 4).

Regarding claims 4, 10, 14, 23, 30, Shah-Nazaroff discloses in Figure 5, a number of viewing options and prices.

Shah-Nazaroff and Eggleston do not disclose transmitting an option price in response to a user request.

The examiner takes official notice that transmitting a price in response to a user request is well known in the art, for example, when online shopping, products may be listed without a price, but merely a link to further information on the product which includes pricing information to entice a user to purchase.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the combination of Shah-Nazaroff and Eggleston to transmit pricing information in response to a user request to entice a user to purchase an upgrade option.

Regarding claims 5, 15, 24, Shah-Nazaroff discloses in Figure 5, different pricing options, which include a normal, play option.

Art Unit: 2611

Regarding claims 6, 16, 25, 43, Shah-Nazaroff discloses that a user may purchases video and audio upgrades for a Video game, which are based upon how long a user plays, upgraded options cost more due to additional bandwidth consumption (Figure 5, column 2, lines 63-67, column 6, lines 41-47), VOD programs may also be viewed by a user.

Shah-Nazaroff and Eggleston do not disclose a random access option and a fee associated with a length of time that random access options are accessed.

The examiner takes official notice that random access options, such as trick play modes, used in conjunction with VOD are well known in the art.

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the combination of Shah-Nazaroff and Eggleston which charges users additional fees for utilizing more bandwidth to include a trick play option and charge a user additional fees to compensate the provider for the additional bandwidth costs, thus enabling a provider to maintain QoS requirements to their existing customers.

Regarding claims 7, 17, 26, and 44, Eggleston discloses a rate governor which tracks the time and expense for networked resources a client uses, rates might be higher for better quality of service, or rates may be different based upon the time of day, alerts are sent to a user to let them know to stay within their budget, billing estimates for use may also be presented to a user (column 13, line 60-column 14, line 53, column 15, lines 25-41).

Art Unit: 2611

Regarding claims 20, 28, Shah-Nazaroff discloses in figure 5, a number of viewing options with prices for PPV and VOD listings, such as audio and video quality upgrades and the ability to record, prices are higher for better quality video as more bandwidth is consumed (column 2, lines 17-52, 63-67, column 3, lines 1-16, 65-67, Figure 4), Figure 8, shows a server system with broadcast source i/o module 830, billing I/O 840, and client I/O 820 (column 10, lines 1-36).

Shah-Nazaroff does not disclose dynamically assigning a price criterion to a group of viewing options based in part on bandwidth allocation information or positioning the bandwidth manager in the headend.

Eggleston discloses a rate governor which tracks the time and expense for networked resources a client uses, rates might be higher for better quality of service, or rates may be different based upon the time of day, alerts are sent to a user to let them know to stay within their budget, billing estimates for use may also be presented to a user (column 13, line 60-column 14, line 53, column 15, lines 25-41).

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Shah-Nazaroff to dynamically price options according to the time of day or available bandwidth as taught by Eggleston, thus compensating for a providers bandwidth costs during prime time hours, and offering incentives for users to watch programs during less popular viewing hours.

Eggleston does not disclose a bandwidth allocation manager and pricing system in a headend.

Art Unit: 2611

The examiner takes official notice that placing billing computers and bandwidth managers in the headend is well known in the art.

Therefore it would have been obvious to one skilled in the art at the time of invention to modify Shah-Nazaroff and Eggleston to place the pricing system and bandwidth manager within a headend, thus providing a dedicated interface to handle all the subscribers on a network and would not subject the hardware to an overly large number of requests.

Regarding claims 29, 37, 41, Shah-Nazaroff discloses in figure 5, a number of viewing options with prices for PPV and VOD listings, such as audio and video quality upgrades and the ability to record, prices are higher for better quality video as more bandwidth is consumed, tuner 230 may be a digital receiver that transmits program choices and requests over communications media 120 (column 2, lines 17-52, 63-67, column 3, lines 1-16, 65-67, column 4, lines 7-54, Figures 3, 4), Figure 8, shows a server system with broadcast source i/o module 830, billing I/O 840, and client I/O 820 (column 10, lines 1-36).

Shah-Nazaroff does not disclose dynamically assigning a price criterion to a group of viewing options based in part on bandwidth allocation information or positioning the bandwidth manager in the headend.

Eggleston discloses a rate governor which tracks the time and expense for networked resources a client uses, rates might be higher for better quality of service, or rates may be different based upon the time of day, alerts are sent to a user to let them

Art Unit: 2611

know to stay within their budget, billing estimates for use may also be presented to a user (column 13, line 60-column 14, line 53, column 15, lines 25-41).

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Shah-Nazaroff to dynamically price options according to the time of day or available bandwidth as taught by Eggleston, thus compensating for a providers bandwidth costs during prime time hours, and offering incentives for users to watch programs during less popular viewing hours.

Eggleston does not disclose a bandwidth allocation manager and pricing system in a headend.

The examiner takes official notice that placing billing computers and bandwidth managers in the headend is well known in the art.

Therefore it would have been obvious to one skilled in the art at the time of invention to modify Shah-Nazaroff and Eggleston to place the pricing system and bandwidth manager within a headend, thus providing a dedicated interface to handle all the subscribers on a network and would not subject the hardware to an overly large number of requests.

Regarding claim 32, Shah-Nazaroff discloses in figure 5, a number of checkboxes for options and a submit button for an on demand movie.

Shah-Nazaroff and Eggleston do not disclose displaying a utilization indication of a viewing option.

The examiner takes official notice that displaying an indicator for utilizing a viewing option is well known in the art.

Art Unit: 2611

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Shah-Nazaroff and Eggleston to display an indication that a viewing option is being used, thus reminding a user of which options they have selected.

Regarding claims 33 and 34, Shah-Nazaroff discloses in figure 5, a number of checkboxes for options and a submit button for an on demand movie.

Shah-Nazaroff and Eggleston do not disclose displaying an elapsed time or displaying an indication of usage of a viewing option intermittently.

The examiner takes official notice that displaying an elapsed time, for example an indicator, which notes that the program started 5 minutes ago, and an indicator displayed intermittently, such as a trick play indicator, is well known in the art.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Shah-Nazaroff and Eggleston to display an elapsed time, thus enabling a user to know how much of a program they have missed, and to display an indicator intermittently, to remind a user of the viewing option they are utilizing.

Regarding claims 35 and 36, Shah-Nazaroff discloses in figure 5, a number of checkboxes for options and a submit button for an on demand movie.

Shah-Nazaroff and Eggleston do not disclose displaying an indication of usage of a viewing option after a user uses a random access feature.

The examiner takes official notice that displaying a trick play indicator is well known in the art.

Art Unit: 2611

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Shah-Nazaroff and Eggleston to utilize a trick play indicator, to let a user know when a trick play feature is activated.

Regarding claim 38, Shah-Nazaroff discloses a menu of viewing options.

Shah-Nazaroff and Eggleston do not disclose displaying a user selectable icon representing a menu of available alternate viewing options.

The examiner takes official notice that the use of a user selectable icon within an electronic program guide to bring up a menu of options is well known in the art.

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the user interface of Shah-Nazaroff and Eggleston to include a user selectable icon, thus enabling a user to recognize when additional options are available for a program.

Regarding claims 39 and 40, Shah-Nazaroff discloses in figure 5, a number of checkboxes for options and a submit button for an on demand movie.

Shah-Nazaroff and Eggleston do not disclose displaying an indication of usage of a viewing option after a user uses a random access feature.

The examiner takes official notice that displaying a trick play indicator is well known in the art.

Therefore, it would have been obvious to one skilled in the art at the time of invention to modify Shah-Nazaroff and Eggleston to utilize a trick play indicator, to let a user know when a trick play feature is activated.

Art Unit: 2611

Regarding claim 42, Shah-Nazaroff discloses in Figure 5, different pricing options, which include a normal, play option.

Claims 8, 18, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,157,377 to Shah-Nazaroff in view of U.S. Patent 5,764,899 to Eggeston in further view of U.S. Patent 6,057,872 to Candelore.

Regarding claim 8, 18, and 27, Shah-Nazaroff discloses a system, which provides a number of viewing options to a user.

Shah-Nazaroff and Eggleston do not show assigning a price criterion to a subscriber incentive.

Candelore discloses a number of digital coupons which may be offered to a subscriber for the purchase of pay programs, different criteria allow different numbers of coupons to be transmitted to a user, such as the number of pay per view programs watched, recent programming upgrades and the like, trial of premium services may also be offered (column 5, line 6-column 7, line 5, Figure 4-7).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the dynamic pricing of viewing options as taught by the combination of Shah-Nazaroff and Eggleston to include a subscriber incentive as taught by Candelore, to encourage a user to try out additional programming.

Art Unit: 2611

Claims 45 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,157,377 to Shah-Nazaroff in view of U.S. Patent 5,764,899 to Eggeston in further view of U.S. Patent 6,701,528 to Arsenault.

Regarding claims 45 and 46, Shah-Nazaroff discloses a menu, which enables a user to select video options, and also includes a VCR 606 (figure 6).

Shah-Nazaroff and Eggleston do not disclose downloading and storing content in a storage device during a time of low bandwidth consumption.

Arsenault discloses a VOD system, which pre-stores a segment in a STB (Figure 2), segments may be downloaded in the middle of the night when there is more available bandwidth (column1 6, lines 25-49,).

Therefore it would have been obvious to one skilled in the art at the time of invention to modify the combination of Shah-Nazaroff and Eggleston to download VOD program segments overnight when more bandwidth is available as taught by Arsenault, to optimize bandwidth utilization and provide on demand functions without consuming additional bandwidth.

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hunter B. Lonsberry whose telephone number is 703-305-3234. The examiner can normally be reached on Monday-Friday during normal business hours.

Art Unit: 2611

Page 12

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**HBL** 

VIVEK SRIVASTAVA PRIMARY EXAMINER